

TAXONOMIC NOTES ON FOUR SPECIES OF  
LEXIPHANES (COLEOPTERA: CHRYSOMELIDAE)  
FROM MIDDLE AMERICA<sup>1</sup>

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For his revision of the *Lexiphanes* north of Mexico, Balsbaugh (1966) borrowed "types" from several European museums for purposes of identification. Some of the specimens which he received were the Middle American species *L. guatemalensis* (Jacoby), *L. sculptilis* (Jacoby), *L. scaphidioides* (Suffrian), and *L. anaglypticus* (Suffrian). This paper redescribes these species and designates lectotypes for the two Jacoby species. These descriptions of the Jacoby species are based only upon their respective lectotypes. No lectotypes are fixed for either of the two Suffrian species for the reasons given in the discussion under these species.

Acknowledgments: For the loan of this material the author is indebted to J. Balfour-Browne, British Museum (Natural History); Fritz Hieke, Humboldt Universität, Berlin; and J. O. Hüsing, Martin Luther Universität, Halle-Wittenberg, Deutsche Demokratische Republik. Appreciation is also expressed to Francisco Pacheco M., Centro de Investigaciones Agrícolas del Norte, Ciudad Obregon, Sonora, México, for the loan and exchange of Mexican specimens. Research for this paper was conducted while the author was in the employ of the Pennsylvania Department of Agriculture, Harrisburg, Pennsylvania.

*Lexiphanes guatemalensis* (Jacoby)

*Monachus guatemalensis* Jacoby, 1880:38.

*Lexiphanes guatemalensis* (Jacoby). Blackwelder, 1946: 643 (checklist).

Lectotype, here designated: Female, "Zapote, Guatemale"; British Museum (Nat. Hist.).

*Description.* Head black with blue reflections; frons flat, finely alutaceous with a few punctures. Eyes emarginate around antennal bases. Labrum fulvous. Antennae with basal 2 segments fulvous, segments 3 and 4 black and with a few short setae (segments 5 through 11 of right antenna and 3 through 11 of left antenna missing). Pronotum bluish-black with distinct fine punctures evenly distributed over entire surface; disc evenly convex. Prosternum bluish-black, alutaceous, length two-thirds of width.

Elytra bluish-black with orange-red fascia; fascia emarginate posteriorly around humeri, covering epipleura, and converging medially but not completely to suture. Curvature evenly convex except raised dorsally along elevated scutellum. Discal striae indistinct; striae punctures distinct but becoming effaced posteriorly. Surface finely alutaceous. Marginal striae, along with epipleura, strongly curved ventrally.

<sup>1</sup> Approved by the Director of the South Dakota Agricultural Experiment Station as Journal Series No. 716.

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Scutellum nearly equilaterally triangular, base slightly shorter than sides; posterior apex elevated above level of base; surface smooth. Pygidium bluish-black, alutaceous. Abdominal intercoxal process setose. Fifth abdominal segment of female with glabrous fovea medially. A smaller setose fovea on each side of more shining central one. Legs bluish-black with following parts missing from lectotype: left protibia and tarsus, right protarsus, mesotarsal segments 2 through 5 of both legs, and right hind leg including coxa.

*Measurements.* The following measurements were taken from the lectotype (a female): body length, 3.75 mm.; body width, 2.50 mm.; body thickness, 2.10 mm.; pronotal length, 1.25 mm.; pronotal width, 2.25 mm.; elytral length, 2.50 mm.; epipleural length, 1.25 mm.

*Discussion:* The author examined 3 specimens of this species (1 female and 2 males), all from the Jacoby collection, British Museum (Natural History). Jacoby (1880) based his original description primarily on the female and only casually mentioned the males. Perhaps as an oversight, he failed to include the female when listing the type localities. Nevertheless, I am designating this female as lectotype because it carries the tag "Type Sp. figured"; it compares closely with the specimen figured by Jacoby; and it was the first specimen in the series of syntypes. Further, it is the only female in the group. I therefore consider that the lectotype is the specimen figured by Jacoby (1880, pl. III., fig. 1) and the chief subject for the original description.

Variation was observed between the three syntypes. One (Cordova, México) has much wider elytral fasciae. The ground color of this specimen is more light purple rather than the deep bluish-black of the other beetles.

### *Lexiphanes sculptilis* (Jacoby)

*Monachus sculptilis* Jacoby, 1880:41.

*Lexiphanes sculptilis* (Jacoby). Blackwelder, 1946: 644 (checklist).

Lectotype, here designated: Male, "Guanajuato, Mexico, Salle Coll.;" British Museum (Nat. Hist.).

*Description.* Head black; frons flat, alutaceous and with a few punctures. Eyes emarginate at antennal bases. Labrum black with fulvous distal margin. Antennae with basal two segments slightly fulvous; segments 3 and 4 becoming darker; segments 5 through 11 black, setose, and broader than basal 4. Pronotum black, alutaceous, with large basal median punctures diminishing laterally in number and size, and with some very fine punctures on disc in front of basal median punctures; disc evenly convex. Prosternum brownish-black, alutaceous; lateral margins rugulose; subquadrate.

Elytra bluish-black, evenly convex except raised dorsally along elevated scutellum. Deeply striate-punctate, marginal and submarginal striae especially well impressed; punctures large, becoming finer posteriorly; surface alutaceous. Scutellum narrowly triangular, pointed; apex elevated somewhat above level of base; surface very finely alutaceous. Pygidium black, roughly alutaceous, with broad close punctures. Venter black, alutaceous. Abdominal intercoxal process with long, close setae. Fifth abdominal segment of male non-foveate and with a few setae. Legs black, alutaceous. Tarsal claws appendiculate.

*Measurements.* The following measurements were taken from the lectotype (a male): body length, 2.62 mm.; body width, 1.70 mm.; body thickness, 1.50 mm.; pronotal length, 1.00 mm.; pronotal width, 1.50 mm.; elytral length, 1.62 mm.; epipleural length, 1.00 mm.



Discussion: The lectotype can further be recognized by the following labels. On a blue tag: "*Monachus sculptilis* Jacoby," and on a white tag: "B.C.A., Col. VI, 1. *Monachus sculptilis* Jac." I removed the lectotype from its mount, which was formerly glued by its ventrum to a quadrangular card, and remounted it on its right side to a triangular point in order to study its ventrum.

The second specimen of Jacoby's series was labeled as follows: "Guanajuato" "Mexico Salle Coll." "333" "B.C.A. Col. VI, 1. *Monachus sculptilis* Jac."

Balsbaugh (1966) notes a close relationship, based on genitalic similarities, between *L. sculptilis* and *L. mexicanus* (Jacoby).

*Lexiphanes scaphidioides* (Suffrian)

*Monachus scaphidioides* Suffrian, 1852:215.

*Lexiphanes scaphidioides* (Suffrian). Blackwelder, 1946: 644 (checklist).

Syntypes: "In Yucatan (*Mus. Chevrolat*) und Guatemala (*Mus. Deyrolle.*)" (Suffrian, 1852).

FIRST SYNTYPE: Female, type number "24372"; "Guatemala"; Martin Luther Universität, Halle-Saale, Deutsche Demokratische Republik.

*Description.* Head black; frons flat, finely alutaceous. Eyes emarginate around antennal bases. Distal edge of labrum fulvous. Antenna with basal 5 segments fulvous, segments 6 through 11 black and with setae. Pronotum dull black, finely alutaceous; disc impunctate, elevated so that pronotum is not evenly convex but slightly lowered mid-basally; basal margin feebly rugose medially. Prosternum subquadrate; alutaceous along anterior margin; sparsely, feebly punctate.

Elytra evenly convex; black with yellowish-red fascia; fascial width two-thirds length of elytra; the fascia emarginate posteriorly around humeri, covering epipleura, and converging medially but not completely to suture. Discal striae and punctures obsolete, only feeble "water-soaked" spots in place of strial punctures visible on fascia. Surface very finely alutaceous. Marginal striae impressed and nearly parallel with impressed submarginal striae in vicinity of epipleura. Scutellum long and narrow (base three-fourths wide as sides long); posterior apex elevated; surface very finely alutaceous (nearly glabrous). Pygidium black, alutaceous, with sparse, relatively broad but shallow punctures. Ventrums black, alutaceous. Fifth abdominal segment of female with medial fovea; a transverse depression at posterior end of segment; long setae bordering medial fovea. Legs black. Tarsal claws appendiculate.

*Measurements.* The following measurements were taken from the first syntype (a female): body length, 2.88 mm.; body width, 2.00 mm.; body thickness, 1.50 mm.; pronotal length, 1.00 mm.; pronotal width, 1.75 mm.; elytral length, 1.88 mm.; epipleural length, 1.12 mm.

SECOND SYNTYPE: Male, type number "19690"; "Guatemala"; Martin Luther Universität, Halle-Saale, Demokratische Republik.

*Description.* Head brownish-black dorsally, fulvous from antennal bases antero-ventrally to and including labrum. Frons convex between upper lobes of deeply emarginate eyes. Surface very finely alutaceous. Labrum long, being slightly shorter than broad. Antennae with proximal 4 segments and basal part of fifth fulvous; segments 6 through 11 brownish-black and setose. Pronotum dull black, alutaceous, impunctate, and evenly convex. Prosternum wider than long (proportions not readily discernible on syntype because of being obscured by crossed prolegs); finely alutaceous.

Elytra brownish-black with yellowish fascia; width of fascia slightly less than one-half length of elytra, emarginate posteriorly around humeri, covering epipleura, and converging medially but not completely to suture; evenly convex. Discal striae obsolete, punctures very shallow. Surface finely alutaceous. Marginal striae impressed and nearly parallel with impressed submarginal striae in vicinity of epipleura. Scutellum with base two-thirds wide as sides long; base arched anteriorly; posterior apex elevated; surface very finely alutaceous. Pygidium brownish-black, alutaceous, with relatively broad but shallow punctures, each bearing a single seta. Fifth abdominal segment of male without fovea but setose medially. Legs brownish-black but with basal portions of pro- and mesofemora fulvous. Tarsal claws appendiculate.

*Measurements.* The following measurements were taken from the second syntype (a male): body length, 2.38 mm.; body width, 1.50 mm.; body thickness, not accurately discernible due to mutilation of the specimen by the insect pin; pronotal length, 0.88 mm.; pronotal width, 1.33 mm.; elytral length, 1.50 mm.; epipleural length, 0.63 mm.

*Discussion:* In spite of Suffrian's accreditation of Chevrolat as author, Suffrian is the currently acknowledged author of *L. scaphidioides*, as he is the first to have described the species (Suffrian, 1852). *Lexiphanes scaphidioides* of Chevrolat is presently believed to be a *nomen nudum*.

Although Suffrian (1852) listed both Guatemala and Yucatan as type localities, only the two Guatemalan specimens were seen by this author. These carried their respective "type" numbers and were accompanied by a separate locality label: "Scaphidioides, Cho. M., Guatemala." This label was purported by Dr. J. O. Hüsing of Martin Luther Universität (personal communication) to be original with Suffrian. The two *L. scaphidioides* redescribed here are believed to be those Guatemalan examples in the original description (Suffrian, 1852). No specimens from Yucatan—those supposedly in the Chevrolat collection—were examined.

It is difficult or impossible to specifically associate Suffrian's description of this species with one or the other of the two specimens studied since Suffrian compiled his description of the species from several examples. After having carefully examined the Guatemalan specimens, this author believes that these beetles represent two distinct species. At least one of these specimens should be described and named as a new species, but this more properly should be done after the "Yucatan (*Mus. Chevrolat*)" specimens (Suffrian, 1852) can also be studied. Then the lectotype designation for *L. scaphidioides* could be fixed more accurately and the specimen determined which represents the new species of the Guatemalan syntypes.

The two Guatemalan syntypes differ from one another as follows: The coloration of the fascia of the first is a brighter yellowish-red, while the ground color of this specimen is a darker black. The overall size of the two beetles varies greatly, even considering the differences in their sex. Proportions are different. The uniqueness of the pronotal conformation of each is quite noticeable. That of the first syntype recurves posteriorly behind the disc, while the pronotum of the second is more uniformly convex. The scutellum of the second syntype appears proportionately shorter than this sclerite of the first. The pronotal surface texture is more coarsely alutaceous in the second specimen than that of the first. The author believes these differences are too great to be either sexual or infra-specific variations.



Both syntypes of *L. scaphidioides* differ from *L. guatemalensis* in having an impunctate pronotum and a black, rather than bluish-black, ground color. They further differ from this latter species in lacking a decided curve in the marginal and submarginal striae near the epipleura. Both specimens of *L. scaphidioides* can be distinguished from *L. mexicanus* (Jacoby) by their elytral fascia which partially surround the humeral umbones in an emarginate manner. The fasciae in *L. mexicanus* do not surround these prominences. Further, the pronotum of *L. mexicanus* usually has a few medial basal punctures, a feature lacking in *L. scaphidioides*.

All specimens of similarly marked beetles from Arizona that this author has seen proved to be *L. mexicanus*. *Lexiphanes scaphidioides* is known to him only by the above two examples which are from Guatemala. He therefore believes that Fall (1934) misidentified Arizonan beetles of *L. mexicanus* as *L. scaphidioides*. Thus *L. scaphidioides* could reasonably be deleted from the North American catalogue of beetles (Blackwelder, 1939).

*Lexiphanes anaglypticus* (Suffrian)

*Monachus anaglypticus* Suffrian, 1852:214.

*Lexiphanes anaglypticus* (Suffrian). Blackwelder, 1946: 643 (checklist).

Holotype: "Von Chalapa. (*Mus. Berol.*)" (Suffrian, 1852).

*Description.* Head dark brown, alutaceous; epicranium evenly rounded with surface of eyes; frons slightly convex. Eyes emarginate around antennal bases. Clypeus brown, with setae. Labrum glossy, light brown, with a few setae, three-fourths as long as wide. Antennae with basal segment fulvous; segments 2 through 5 darker; segments 6 through 11 dark brown, alutaceous, broader, and setose, (segments 7 through 11 missing from right antenna). Pronotum brownish, posterior part lighter, becoming more reddish laterally; surface finely alutaceous; base with an impressed, posteriorly arching, medial line. Prosternum brown, alutaceous, punctate at posterior corners and along posterior margins; length two-thirds of width.

Elytra dark brown, finely alutaceous, punctate-striate, striae shallow and completely effaced over apical half; marginal and submarginal striae deeply impressed for entire length; marginal interstitial spaces decidedly convex. Scutellum long and narrow, sides twice as long as base, very finely alutaceous. Pygidium dark brown, alutaceous, with broad, shallow punctures; impressed and glabrous at posterior corners. Ventrums dark brown, alutaceous. Prosternal episternum yellowish-orange, with recessed area for reception of profemora. Abdominal intercoxal process broad, devoid of setae. Fifth abdominal segment with glabrous fovea medially, a few short setae laterad of fovea, the fovea broader posteriorly. The fifth segment lighter brown posteriorly. Legs dark brown; tibiae of forelegs and all tarsi lighter. Left proleg missing.

*Measurements.* The following measurements were taken from the study specimen (a female): body length, 2.40 mm.; body width, 1.75 mm.; body thickness, 1.40 mm.; pronotal length, 0.80 mm.; pronotal width, 1.50 mm.; elytral length, 1.60 mm.

*Discussion:* The specimen described above carries the "type" number "23568" and is deposited in the Institut für Spezielle Zoologie und Zoologischen Museum, Humboldt-Universität, Berlin. Because of a discrepancy in type locality indications, some doubt exists as to the authenticity of this specimen as holotype. The type locality given with the original description (Suffrian, 1852) is listed here under the nomenclatural

synonymy. The following is from the tag accompanying the presumed holotype from Humboldt-Universität: "anaglypticus Suff. Jalappa (sic) Depp." These differences in spelling may, however, result only from a *lapsus calami* in the published citation. In checking various atlases the locality "Chalapa" could not be found, whereas Jalapa is listed for Mexico, Guatemala, and Nicaragua. The holotype is likely from Mexico.

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#### LITERATURE NOTICE

THE FENNOSCANDIAN, DANISH AND BRITISH SPECIES OF THE GENUS ERNOBIUS THOMSON (COL. ANOBIIDAE). By C. Johnson. Opusc. Ent. 31(1-2): 81-92, 30 figs. 1966.—A key to 9 species, with figures of antennae, pronota, male genitalia, and a few other structures, and with notes on each species are presented. Previous identification has been difficult because of variation; male genitalia have helped alleviate this situation. Many species of *Ernobius* are of economic importance.

A CLASSIFICATION OF THE GENERA AND HIGHER TAXA OF THE MELOID SUBFAMILY ELECTICINAE (COLEOPTERA). By R. B. Selander. Canad. Ent. 98(5): 449-481, 75 figs. 1966.—2 tribes, seven subtribes (3 new), and 10 genera (3 new) are recognized, keyed, and diagnosed. Also, 4 new species are presented. Members are found in the Neotropical, Ethiopian, and Oriental Regions.

STAPHYLININI UND QUEDIINI (COL. STAPHYLINIDAE) VON NEUFUNDLAND, SUDOST-LABRADOR UND NOVA SCOTIA (59. BEITRAG ZUR KENNTNIS DER STAPHYLINIDEN). By A. Smetana. Acta Ent. Fennica 20: 3-60, 77 figs., 1 table. 1965.—Contains mostly distribution records for 59 species and subspecies, of which 6 are new. Also, some new synonymies and a key to the nearctic species of the subgenus *Quedius*.

REVISAO DOS LANGURIINAE NEOTROPICAIS (COLEOPTERA, LANGURIIDAE). By U. R. Martins and F. S. Pereira. Arq. Zool. (Brazil) 13: 139-300, 97 figs., 4 maps. 1965.—Keys, descriptions, distributions, and illustrations of 15 genera (2 new) and 82 species (16 new) are given. The keys are also translated into English in the summary. This group is now well treated in the Western Hemisphere; in 1948 Vaurie did the Languriidae of North America.